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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/290,170	04/13/1999	HIROSHI ARITA	H-7769	9549

7590 12/18/2001

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EXAMINER

FLEMING, FRITZ M

ART UNIT PAPER NUMBER

2836

DATE MAILED: 12/18/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/290,170

Applicant(s)

ARITA ET AL.

Examiner

Fritz M. Fleming

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Fritz M. Fleming
Fritz M. Fleming
Primary Examiner

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. It is to be noted that the independent claims 1-3 were previously drafted in the JEPSON format, thus making an implied admission of prior art of the preamble elements. The examiner thus interprets the previously recited preamble elements to be admitted prior art and hence the improvement portions of the claims are what applicants deem to be novel and lacking from the admitted prior art. Thus applying this admission of prior art to the recently amended claims results in a similar treatment of that claim. See MPEP 2129. Applicant has already admitted that such is well known per the previously drafted JEPSON language. Thus applicant has set forth what is admitted prior art. To merely redraft the claims to remove such from the instant claims does not remove the admission of prior art already made in the file.

Claim Rejections - 35 USC § 103

2. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior elements in view of NEW SCIENTIST.

The admitted prior art sets forth cross border power transfer with path mounted measuring equipment. What is lacking is control and generation of electricity and its directional flow based upon the output of the measuring equipment. NEW SCIENTIST clearly sets forth many objectives and advantages of a global power grid. In order to address the independent claims, it sets forth at page 4 that the international links allow for exportation of spare generating capacity from France to meet peak load demand in Britain. This is clearly indicative of the knowledge of capacity and demand in both France and Britain so as to be able to meet the loads of both. Note also the exportation

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of Swiss power to France to meet peak load demand. Thus numerous examples of cross border electricity traffic are given for the purpose embodied in the independent claims. Thus it would have been obvious to one having ordinary skill in the art at the time that the invention was made to modify the admitted prior art per the teachings of the New Scientist for the purpose of being able to share generating capacity and smooth out surges in demand by exporting spare generating capacity from one country to another when the peak loads in the countries differ. This clearly requires the ability to know and sense when peak power is need in one country so that the surplus from another country can be supplied when it is needed. Thus the combination renders the claims obvious. The New Scientist also teaches many other features, rendering other claims obvious as well. Note the use of numerous types of power (hydro, geothermal). Note the supplying of Africa with a single grid, thus covering numerous time zones as well as above and below equatorial distribution. Since numerous countries of differing monetary units and languages are involved, it is obvious that complex cross border systems take into account such factors and provide means to accommodate for such in order to effectively carry out the business dealings fairly, effectively, and equitably. Clearly such cross border systems also require sophisticated communications systems and hence the mere inclusion of such are deemed to be obvious subject matter within the level of ordinary skill in the art. Certain monetary units (i.e. US Dollar, Swiss Franc, Deutsch Mark) are recognized standards of international trade and hence to peg transactions to such is merely common business practice well known to those skilled in the art. Note the discussion of laying of cables, an Alaska link, thus rendering obvious

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the "transport route of another kind of energy" as pipelines for gas and oil are commonly run underwater and across Alaska. Note also a grid for the Pacific Ocean "ring of fire". Note the use of DC links for German/Czech crossings. The trading of emissions credits in electricity production is well-known and hence obvious subject matter. Common sense dictates that power flow from "good" to "poor" producers as a "good" producer would not want to rely upon a "poor" source as such would simply contravene sound business practice. Now to merely contemplate, as applicant has only done at page 11 of the specification and shown on Figure 1, that a distribution network can extend between the claimed continents is still rendered obvious per the page 2 disclosure of the NEW SCIENTIST which clearly shows that Buckminster Fuller dreamt of continents linked by high-voltage pylons and undersea cables to form a global electricity grid to distribute power from the rainforests of Borneo and the geothermal rocks of Iceland and the Zaire river and France's nuclear power plants. Page 1 even contemplates connection from Siberia to North America, via the Bering Strait. Thus the particular routes are rendered obvious when considering the full extent of the NEW SCIENTIST and the admitted prior art.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-31 are rejected under 35 U.S.C. 112, first paragraph, as containing

subject matter which was not described in the specification in such a way as to enable

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one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is clear that applicants have contemplated or speculated the distribution system of the claims, now interconnecting the North and South American systems, the South American System linked to the Australian System via the Antarctic and the East Asia System linked to the North American System via the Bering Strait. It is one thing to speculate on the possibility or probability to connect these vastly separated systems and another thing to actually "invent" such a system. Applicant has not enabled all of the details needed for crossing vast ocean stretches, crossing mountain ranges, traversing the Antarctic. Anyone, as evidenced by the NEW SCIENTIST article, can dream of such a system, but actually inventing such a system to meet patentability requirements is another story. The examiner bases this on the principles set forth in Harris Corp. v. IXYS Corp. (114 F.3d 1149, 43 USPQ2d 1018 Fed. Cir. 1997) which set forth "A specification stating the broad principles of manipulating the conductiveness and geometries of an electronic device so the device did not exhibit thyristor properties, but did not give specific instructions, was not enabling under 112. "[T]he most we can credit them with is having predicted—rather than invented—such a device.'" The examiner sees this as the situation in this application. Applicants have predicted such a global interconnect, along the lines of Buckminster Fuller's vision as set forth in the NEW SCIENTIST. However, applicants have not enabled all of the details necessary to have invented such a system.

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Continued Prosecution Application

3. The request filed on 10-25-2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/290170 is acceptable and a CPA has been established. An action on the CPA follows.

Response to Arguments

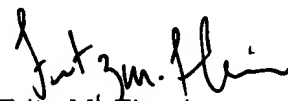
4. Applicant's arguments filed 10-25-2001 have been fully considered but they are not persuasive. Applicants only argue the "vast concept" and that such is not allegedly taught in the NEW SCIENTIST. As pointed out above, the NEW SCIENTIST sets forth Buckminster Fuller's dream of a global grid and page 3 of the NEW SCIENTIST sets forth bringing power to large industrial centers from hydroelectric sites on the Artic rivers, tidal power sites in Argentina, China, Australia, and India, as well as interconnection of the "ring of fire", Iceland and the Rift Valley. The art certainly teaches one of ordinary skill in the art to think big in terms of a global grid. Thus to merely look at a map and draw a global grid to link various locations is obvious subject matter taught by the true scope of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz M. Fleming whose telephone number is 703.308.1483. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Josie Ballato can be reached on 703.308.0269. The fax phone numbers for the organization where this application or proceeding is assigned are 703.308.7722 for regular communications and 703.308.7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1782.

A handwritten signature in black ink, appearing to read "Fritz M. Fleming".

Fritz M. Fleming
Primary Patent Examiner
Art Unit 2836

ff
December 17, 2001